

Claims:

1. Method for the production of trichlorosilane by reaction of silicon with HCl gas at a temperature between 250° and 1100°C, and an absolute pressure of 0.5 - 30 atm in a fluidized bed reactor, in a stirred bed reactor or in a solid bed reactor, characterized in that the silicon supplied to the reactor contains between 30 and 10 000 ppm chromium.
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2. Method according to claim 1, characterized in that the silicon supplied to the reactor contains between 50 and 1000 ppm chromium.
3. Method according to claim 1 or 2, characterized in that
10 chromium is alloyed with the silicon.
4. Method according to claim 1 or 2, characterized in that chromium is mechanically mixed with the silicon before the silicon is supplied to the reactor.
5. Method according to claim 4, characterized in that chromium is
15 mechanically mixed with silicon by subjecting the silicon to grinding using chromium-containing grinding bodies.
6. Method according to claim 1 or 2, characterized in that chromium is added to the reactor separately from the silicon.
7. Silicon for use in the production of trichlorosilane by reaction of silicon
20 with HCl gas, characterized in that the silicon contains between 30 and 10 000 ppm chromium, the remaining except for normal impurities being silicon.
8. Silicon according to claim 7, characterized in that the silicon contains between 50 and 1000 ppm chromium.
9. Silicon according to claim 7 or 8, characterized in that chromium
25 is alloyed with the silicon.
10. Silicon according to claim 7 or 8, characterized in that chromium is mechanically mixed with the silicon.

11. Silicon according to claim 10, characterized in that the mechanical mixing of chromium with silicon is done by subjecting the silicon to grinding using chromium containing grinding bodies.
12. Method for the production of trichlorosilane by reaction of silicon with HCl gas at a temperature between 250 and 1100°C, and an absolute pressure of 0.5 - 30 atm in a fluidized bed reactor, in a stirred bed reactor or in a solid bed reactor, characterized in that chromium is supplied to the reactor in an amount necessary to control a chromium content in the reactor of between 100 and 50 000 ppm based on the weight of silicon in the reactor.
- 10 13. Method according to claim 12, characterized in that chromium is supplied to the reactor in an amount necessary to control the chromium content in the reactor between 200 and 25000 ppm chromium.
14. Method according to claim 12 or 13, characterized in that chromium supplied to the reactor is alloyed with the silicon.
- 15 15. Method according to claim 12 or 13, characterized in that chromium supplied to the reactor is mechanically mixed with the silicon before the mixture is supplied to the reactor.
- 20 16. Method according to claim 15, characterized in that chromium is mechanically mixed with silicon by subjecting the silicon to grinding using chromium-containing grinding bodies.
17. Method according to claim 12 or 13, characterized in that chromium and silicon are added separately to the reactor.
18. Method according to claim 17, characterized in that the chromium compounds are added to the reactor with the HCl gas.
- 25 19. Method according to claim 12 or 13, characterized in that the chromium is added to the reactor together with a compound having another or no effect on the thriclorosilane process.